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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,446	10/21/2003	Jie Liang	TI-36057	3703
23494 7590 09/17/2008 TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265				
EXAMINER				
TSE, YOUNG TOI				
ART UNIT		PAPER NUMBER		
2611				
NOTIFICATION DATE		DELIVERY MODE		
09/17/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/690,446

Applicant(s)

LIANG, JIE

Examiner

YOUNG T. TSE

Art Unit

2611

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7, 9-11, 13-15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 9-11, 15 and 17-21 is/are rejected.
- 7) ☒ Claim(s) 5-6 and 13-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-849)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 04, 2008 has been entered.

Response to Arguments

2. Applicant's arguments filed August 23, 2008 and April 25, 2005 have been fully considered but they are not persuasive.

In response to Applicant's arguments filed April 25, 2005, Applicant argues that nothing is decoded in the low power sleep mode of Gorday because the low power sleep mode is entered into after receiving the frequency synchronization burst and exited before the transmission of data packets. As examiner interprets the low power sleep mode to be the first receiver path of the limitation, Gorday fails teach or suggest a first receiver path for decoding a data packet payload as required by the claim. For the same reason, dependent claims 9 and 17 are allowable over Gorday: the low power sleep mode of Gorday is entered into after the frequency synchronization burst is identified, not "until the data packet is identified" as required by the claims.

The examiner respectfully disagrees Applicant's arguments related to the low power sleep mode of Gorday fails to teach or suggest a [second] receiver path for decoding a data packet payload as required in independent claim 1, and similar to independent claims 10, 18 and 21.

In Figure 2, Gorday discloses a block diagram of a transceiver 102 with a single application device 106 comprising a controller 202. Gorday teaches that when the transceiver 102 is acting as a transmitter, controller 202 may receive format and code information from the application device 106. Controller 202 may form the packet, packet header and synchronization burst (the packet format is shown in Figure 6). Moreover, controller 202 may assign a carrier frequency to a signal to be transmitted and manage the timing and power dissipation of the transceiver 102. When transceiver 102 is acting as a receiver, controller 202 may assign operating frequency to the receiver 206, **decode the received packet** (emphasis added), send information to the application device 106, and manage the timing and power dissipation of the transceiver 102. See paragraph [0051], lines 13-23.

Even Gorday fails to teach the decoding of the received data packet, it is well known to an artisan that a receiver is capable of receiving data packets is also capable of, for example, including a decoder for decoding the data packet information or payload of the received data packets. Further, in the prior art Figure 1 of the instant application, the well known receiver 24 indicates that there is an incoming message and provides timing signals to decode the data, which is normally encrypted. See paragraph [0014] of the specification.

Therefore, the independent claim 1, including the independent claims 10, 18 and 21 are unpatentable over Gorday.

Drawings

3. The drawings were received on August 23, 2008. These drawings are acceptable.

Claim Objections

4. Claims 2, 10-11, 13-15, 17 and 21 are objected to because of the following informalities:

Claim 2, line 2, "is separate" should be "is separated".

Claim 10, line 7, "wherein the data packet is" is suggested change to "data packets" as recited in claim 1.

Claim 10, line 11, "the data packet" should be "a data packet".

Claims 11, 13-15 and 17 all depend from the independent claim 10.

Claim 21, lines 5 and 7, "the preamble" and "the payload" should be "a preamble" and "a payload", respectively.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3, 7, 10-11, 15 and 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Gorday et al. (U.S. Publication No. 2005/0074036 A1, hereinafter "Gorday").

Gorday discloses a wireless communication system in Figure 1 for frequency offset compensation. In the communication system, transceivers 102 and 104 exchange data over a wireless medium and communicate with other application devices 106, 108, 110, and 112.

Fig. 2 shows a block diagram of a transceiver 102 or 104 with a single application device 106 comprising a controller 202, a transmitter 204, a receiver 206, an interface port 208, and a frequency reference 210.

Figure 3 shows a block diagram of the transmitter 204 of the transceiver of Figure 2.

Figure 4 shows a block diagram of the receiver 206 of the transceiver of Figure 2.

Figure 5 applies to a broadcast scenario in which a primary communication device, like a transmitter, is sending data packets to multiple secondary communication devices.

Figure 6 shows a possible Frequency Synchronization Burst (FSB) format for the IEEE 802.15.4 standard which contains a preamble 602, a start-of-frame delimiter 604, and a header 606.

Regarding claims 1, 10, 18 and 21, the wireless communication system or transceiver comprises the controller 202 controls the receiver 206 having a first receiver path or front end (a low power sleep mode) for decoding a preamble to a wireless data packet and a second receiver path or front end (active mode) for decoding a data packet payload, the controller 202 also functions as a packet detection logic to identify data packets directed to the receiver and functions as a switching logic to select the first receiver path (or the first front end) or the second receiver path (or the second front end) depending on whether the data packet has identified a data packet directed to the receiver, wherein the low power sleep mode has a lower decoding resolution than the active mode since the preamble or FSB is a small data packet containing the information about its relative position with respect to the associated payload data packets. See paragraphs [0013]; [0036]; [0041]; [0051]; [0053]; [0055]; [0057]; and [0059], last 5 lines.

Regarding claim 2, the transmitter path 204 is separated from the receiver path 206.

Regarding claims 3, 11 and 20, clearly, the first receiver path or front end (low power sleep mode) requires less power to operate than the second receiver path or front end (active mode).

Regarding claims 7 and 15, although Gorday does not explicitly teach the first receiver path uses a specific barker-code detection to decode the preamble of the data packet, it is well known to a person skill in the to know any kind of coding detection could be used to decode the preamble of the data packer, including the barker-code detection since a barker code is one of many coding techniques. It also described in paragraph [0014] of the prior art Figure 1 of the instant application.

Regarding claims 9 and 17, the controller 202 also functions to select the low power sleep mode until a data packet is identified and then select the active mode to decode the data packet payload.

Regarding claim 19, the controller 202 switches back to the low power sleep mode when receiving of the data packet payload is completed.

Allowable Subject Matter

7. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. Claims 13 and 14 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is 571- 272-3051. The examiner can normally be reached on Monday-Friday 10:00-6:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on 571- 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YOUNG T. TSE/
Primary Examiner, Art Unit 2611